

## Online Supplement

**Table 1** Baseline characteristics of the study population, comparison between study sites.

<b>Characteristic</b>	<b>Larissa n=81</b>	<b>Helsinki n=315</b>	<b>Total n=396</b>	<b>P- Value</b>
Age (years)				<0.001
<65	0	55 (17)	55 (14)	
65-74	26 (32)	113 (36)	139 (35)	
≥ 75	55 (68)	147 (47)	202 (51)	
Median (IQR)	77 (73-82)	74.0 (69-80)	75.0 (70-80)	<0.001
Sex				0.001
Female	48 (59)	121 (38)	169 (43)	
Male	33 (41)	194 (62)	227 (57)	
Education				<0.001
Primary	65 (80)	63 (20)	128 (32)	
Secondary	10 (12)	129 (41)	139 (35)	
Tertiary	6 (7)	89 (28)	95 (24)	
Unknown	0	34 (11)	34 (9)	
Employment status				0.002
Unemployed	0	5 (2)	5 (1)	
Employed	2 (3)	57 (18)	59 (15)	
Pensioner	77 (95)	249 (79)	326 (82)	
Other	2 (3)	4 (1)	6 (2)	
Unknown	0	1 (0.3)	1 (0.3)	

BMI (missing in 82)	28 (26-30)	27.0 (24-30)	28 (24-30)	0.020
Type of atrial fibrillation				0.003
New-onset	20 (25)	118 (38)	138 (35)	
Paroxysmal	25 (31)	117 (37)	142 (36)	
Persistent	36 (44)	80 (25)	116 (29)	
Comorbidities				
History of ischemic stroke/TIA	24 (30)	59 (19)	83 (21)	0.032
Hypertension	79 (98)	298 (95)	377 (95)	0.272
Diabetes	20 (25)	73 (23)	93 (24)	0.774
Coronary artery disease	11 (14)	58 (18)	69 (17)	0.306
Prosthetic heart valve	2 (3)	5 (2)	7 (2)	0.635
Heart failure	8 (10)	26 (8)	34 (9)	0.642
Peripheral artery disease	1 (1)	14 (4)	15 (4)	0.324
Carotid stenosis	8 (10)	36 (11)	44 (11)	0.692
Dyslipidemia	43 (53)	188 (60)	231 (58)	0.283
Pulmonary disease	5 (6)	51 (16)	56 (14)	0.021
Renal disease	3 (4)	26 (8)	29 (7)	0.161
Hepatic disease	2 (3)	3 (1)	5 (1)	0.272
Harmful alcohol usage	4 (5)	24 (8)	28 (7)	0.477
Active cancer	2 (3)	7 (2)	9 (2)	1.000
Prior cancer	1 (1)	32 (10)	33 (8)	0.006
Dementia	3 (3)	4 (1)	7 (2)	0.154
Prior depression diagnosis	2 (2)	13 (4)	15 (3)	0.745

Other mental illness	5 (6)	6 (2)	11 (3)	0.052
Intracranial bleeding	3 (4)	6 (2)	9 (2)	0.397
Major extracranial bleeding	2 (3)	4 (1)	6 (2)	0.607
Smoking				0.382
Current	7 (9)	32 (10)	39 (10)	
Stopped during prior 2 years	1 (1)	7 (2)	8 (2)	
Stopped >2 years prior index stroke	25 (31)	123 (39)	148 (37)	
Never smoked	48 (59)	153 (49)	201 (51)	
Antiplatelet use prior index IS	17 (21)	60 (19)	77 (19)	0.694
VKA use prior index IS	18 (22)	83 (26)	101 (26)	0.447
NOAC use prior index IS	14 (17)	45 (14)	59 (15)	0.499
CHA <sub>2</sub> DS <sub>2</sub> -VASc	6 (5-6)	5 (4-6)	5 (5-6)	<0.001
HAS-BLED	3 (3-3)	3 (3-3)	3 (3-3)	0.120
HAS-BLED without TTR	3 (3-3)	3 (3-3)	3 (3-3)	0.055
SAMe-TT <sub>2</sub> R <sub>2</sub>	1 (1-2)	1 (1-2)	1 (1-2)	0.442
Index Stroke characteristics				
NIHSS	6 (2-9)	3 (2-6)	4 (2-7)	<0.001
Chronic lesion	23 (28)	100 (32)	123 (31)	0.561
Laterality				0.708
Left	4 (17)	23 (23)	27 (22)	
Right	12 (52)	43 (43)	55 (45)	

Both	7 (30)	34 (34)	41 (33)	
Arterial territory				0.043
ACA	4 (17)	4 (4)	8 (7)	
MCA	13 (57)	40 (40)	53 (43)	
PCA	4 (17)	31 (31)	35 (29)	
Vertebrobasilar	0	1 (1)	1 (1)	
Multiple territories	2 (9)	24 (24)	26 (21)	
Leukoaraiosis	53 (65)	147 (47)	200 (51)	0.003
Current lesion	24 (30)	261 (83)	285 (72)	<0.001
Laterality				0.302
Left	15 (63)	121 (46)	136 (48)	
Right	8 (33)	118 (45)	126 (44)	
Both	1 (4)	22 (8)	23 (8)	
Arterial territory				0.206
ACA	2 (8)	5 (2)	7 (3)	
MCA	17 (71)	163 (63)	180 (63)	
PCA	4 (17)	59 (23)	63 (22)	
Vertebrobasilar	0	13 (5)	13 (5)	
Multiple territories	1 (4)	21 (8)	22 (8)	
TOAST				0.020
Large-artery atherosclerotic	1 (1)	10 (3)	11 (3)	
Cardioembolism	61 (76)	249 (79)	310 (79)	
Small-vessel occlusion	7 (9)	8 (3)	15 (4)	

Other determined	1 (1)	0	1 (0.3)	
Undetermined	10 (13)	48 (15)	58 (15)	
Functional stroke outcome at 3 months from index stroke				0.786
Dependent	28 (35)	114 (36)	142 (36)	
Independent	53 (65)	201 (64)	254 (64)	

**Table 2.** Medication at index hospitalization discharge and at the time of follow-up, separately for study sites.

<b>Medication information</b>	<b>Larissa N=81</b>	<b>Helsinki N=315</b>	<b>Total N=396</b>
Medication at the hospital discharge			
Antiplatelet medication	4 (5)	21 (7)	25 (6)
Oral anticoagulant			
None	3 (4)	0	3 (1)
VKA	15 (19)	82 (26)	97 (25)
Apixaban	27 (33)	138 (44)	165 (42)
Dabigatran	21 (26)	48 (15)	69 (17)
Edoxaban	0 (0)	3 (1)	3 (1)
Rivaroxaban	15 (19)	44 (14)	59 (15)
LMWH, therapeutic dose	1 (1)	0	1 (0.3)
Antihypertensive drug	74 (91)	296 (94)	370 (93)
Statin	75 (93)	284 (90)	359 (91)
Antidiabetic drug	19 (24)	74 (24)	93 (24)
Total number of pills per day			
Median (IQR)	5 (4-7)	7 (5-10)	7 (5-9)
Over 5 tablets per day	38 (47)	225 (71)	263 (66)
Oral anticoagulation switch or discontinuation during the follow-up			
Switched from VKA to NOAC	1 (1)	25 (8)	26 (7)
Switched from VKA to LMWH	0	3 (1)	3 (1)

Switched from NOAC to VKA	1 (1)	0	1 (0.3)
Switched from NOAC to NOAC	8 (10)	9 (3)	17 (4)
NOAC dose adjustment	10 (12)	2 (1)	12 (3)
Permanent discontinuation	1 (1)	2 (1)	3 (1)
Medication at the follow-up			
Antiplatelet medication	6 (8)	18 (6)	24 (6)
Oral anticoagulant			
None	2 (3)	7 (2)	9 (2)
VKA	14 (18)	54 (17)	68 (17)
Apixaban	31 (39)	153 (49)	184 (47)
Dabigatran	17 (21)	52 (17)	69 (18)
Edoxaban	0	4 (1)	4 (1)
Rivaroxaban	16 (20)	45 (14)	61 (15)
LMWH, therapeutic dose	1 (1)	7 (2)	8 (2)
Antihypertensive drug	75 (93)	291 (92)	366 (93)
Statin	65 (86)	274 (87)	339 (86)
Antidiabetic drug	19 (24)	73 (23)	92 (23)
Total number of pills per day			
Median (IQR)	7 (5-8)	8 (5-11)	7 (5-10)
Over 5 tablets per day	53 (66)	236 (75)	289 (73)

IQR = interquartile range, VKA = vitamin-K antagonists, NOAC = non-vitamin K antagonist oral anticoagulants, LMWH = low molecular weight heparin

**Table 3.** Univariate comparison between patients with good (ARMS score  $\leq 17$ ) and poor adherence (ARMS score  $> 17$ ).

<b>Baseline characteristics</b>	<b>Good adherence n=213</b>	<b>Poor adherence n=182</b>	<b>P-value</b>
Site			<0.001
Larissa	67 (32)	13 (7)	
Helsinki	143 (68)	172 (93)	
Age	76 (71-81)	73 (68-79)	0.036
Age categories			0.093
<65 years	24 (24)	31 (17)	
65-74 years	69 (33)	84 (45)	
$\geq 75$ years	117 (56)	70 (38)	
Male sex	109 (52)	118 (64)	0.017
Education			<0.001
Unknown	20 (9)	14 (8)	
Primary	89 (38)	48 (26)	
Secondary	77 (37)	62 (34)	
Tertiary	34 (16)	61 (33)	
New-onset atrial fibrillation	79 (38)	59 (32)	0.237
Heart failure	24 (11)	10 (5)	0.033
Prior cancer	12 (6)	21 (11)	0.043
Previous ischemic stroke or TIA	54 (26)	29 (16)	0.015

High alcohol consumption	12 (6)	16 (9)	0.257
Ever smoked tobacco	94 (44)	100 (55)	0.034
Prior VKA	44 (21)	56 (30)	0.038
Prior NOAC	30 (14)	29 (16)	0.699
<b>Index stroke hospital stay</b>			
NIHSS score	4 (2-8)	3 (2-6)	0.014
Current lesion	140 (67)	145 (78)	0.012
Laterality			0.457
Left	72 (51)	64 (44)	
Right	58 (41)	68 (47)	
Both	10 (7)	13 (9)	
Arterial territory			0.353
ACA	4 (3)	3 (2)	
MCA	89 (64)	91 (63)	
PCA	35 (25)	28 (19)	
Vertebrobasilar	4 (3)	9 (6)	
Multiple arterial territory	8 (6)	14 (10)	
TOAST classification			0.430
Large-artery atherosclerotic	4 (2)	7 (4)	
Cardioembolism	163 (78)	146 (79)	
Small-vessel occlusion	10 (5)	5 (3)	
Other determined	0	1 (0.5)	
Undetermined	33 (16)	25 (14)	
Discharge CHA <sub>2</sub> DS <sub>2</sub> -VASc	6 (5-6)	5 (4-6)	0.010

Discharge HAS-BLED without TTR	3 (3-3)	3 (3-3)	0.439
Discharge SAME-TT <sub>2</sub> R <sub>2</sub>	1 (1-2)	1 (1-2)	0.296
Discharge oral anticoagulation			0.033
None	3 (1)	0	
VKA	42 (20)	54 (29)	
NOAC	165 (79)	131 (71)	
Total number of pills at discharge	7 (5-9)	7 (5-9)	0.442
>5 pills per day at discharge	133 (64)	129 (70)	0.201
<b>Follow-up Interview</b>			
Follow-up type			0.002
At outpatient clinic	10 (5)	6 (3)	
By telephone with the patient	172 (81)	172 (95)	
By telephone with a next-of-kin	28 (13)	7 (4)	
Follow-up time in months	22 (12-34)	21 (12-33)	0.964
Follow-up oral anticoagulation			0.038
None	7 (3)	2 (1)	
VKA	28(13)	40 (22)	
NOAC	175 (83)	143 (77)	
Total number of pills at follow-up	7 (5-9)	7 (5-11)	0.442
>5 pills per day	157 (75)	132 (71)	0.445
Question 2*	23 (11)	65 (35)	<0.001
Question 3†	28 (14)	73 (40)	<0.001
Who is responsible for the medication?			0.038
The patient	154 (74)	153 (83)	

Family member or another caregiver	54 (26)	32 (17)	
Question 5 <sup>‡</sup>	61 (29)	60(32)	0.526
Knowledge about anticoagulation <sup>§</sup>			0.730
Unaware	31 (15)	23 (12)	
Partially informed	91 (44)	81 (44)	
Completely aware	85 (41)	81 (44)	

Data are n (%) or median (interquartile range, IQR).

TIA = transient ischemic attack, VKA = vitamin-K antagonists, NIHSS = The National Institutes of Health Stroke Scale, or NIH Stroke Scale, ACA = anterior cerebral artery, MCA = middle cerebral artery, PCA = posterior cerebral artery, TOAST = Trial of ORG 10172 in Acute Stroke Treatment, CHA<sub>2</sub>DS<sub>2</sub>-VASc = Congestive heart failure, Hypertension, Age  $\geq$ 75 years, Diabetes, previous Stroke or transient ischemic attack, Vascular disease, Age 65-74 years, Sex category female, HAS-BLED = hypertension, abnormal liver/ renal function, history of stroke, bleeding tendency, labile INRs, elderly aged  $\geq$  65 years, drug/alcohol use, TTR = Time in therapeutic range, SAME-TT<sub>2</sub>R<sub>2</sub> = Sex, Age <60 years, Medical history, Tobacco use, Race.

\* Do you think your anticoagulation regimen is not implemented as well as planned?

† Do you think your overall medication is not implemented as well as planned?

‡ Were there any complications of the anticoagulation treatment?

§ Completely aware: Atrial fibrillation as indication, expected benefit as thrombosis prophylaxis and knowledge of possibility of bleeding complications.